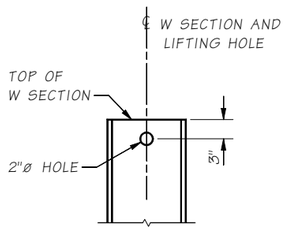
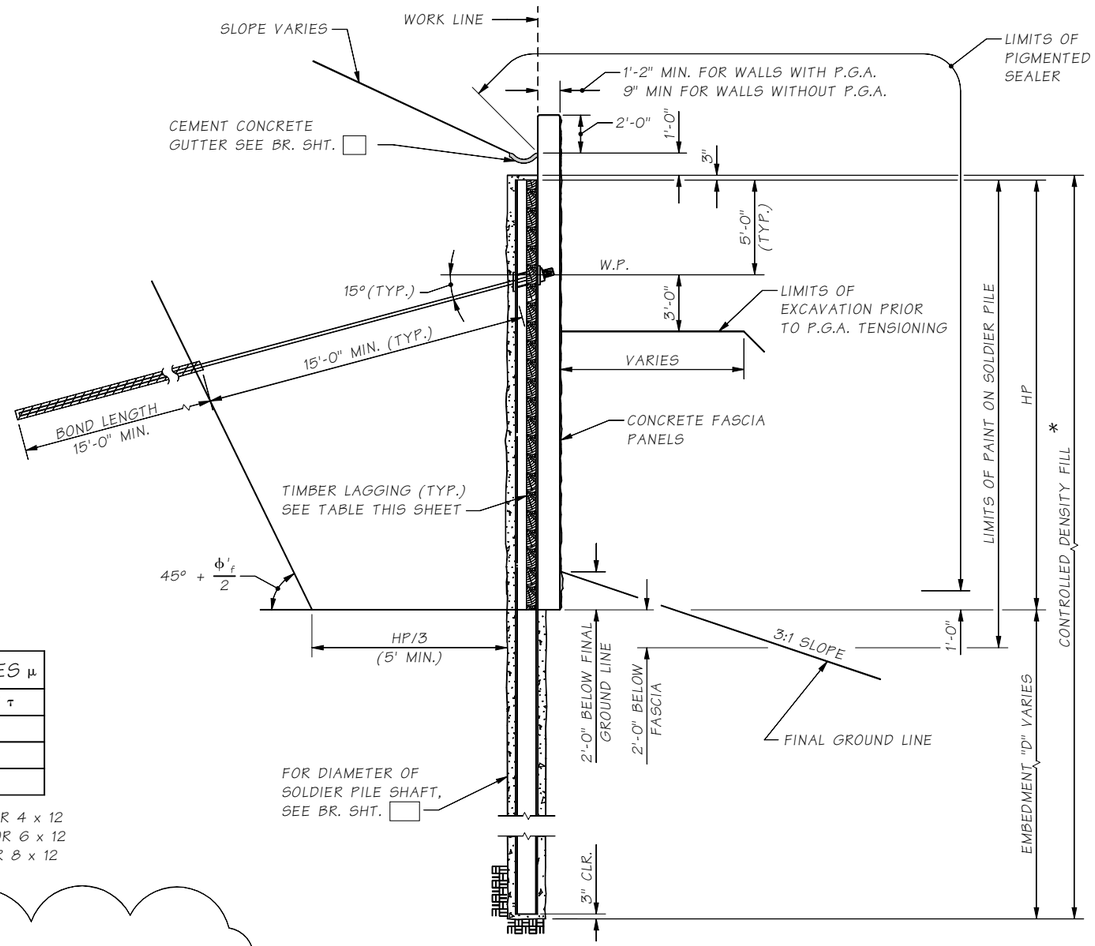


SOLDIER PILE LIFTING HOLE

LIFTING HOLE TO BE DRILLED IN THE SHOP PRIOR TO PAINTING THE PILE.

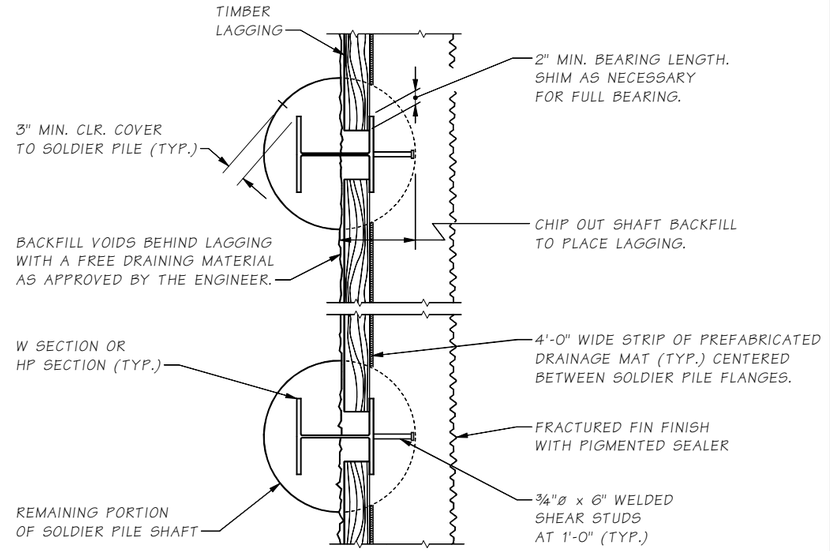


TYPICAL SECTION

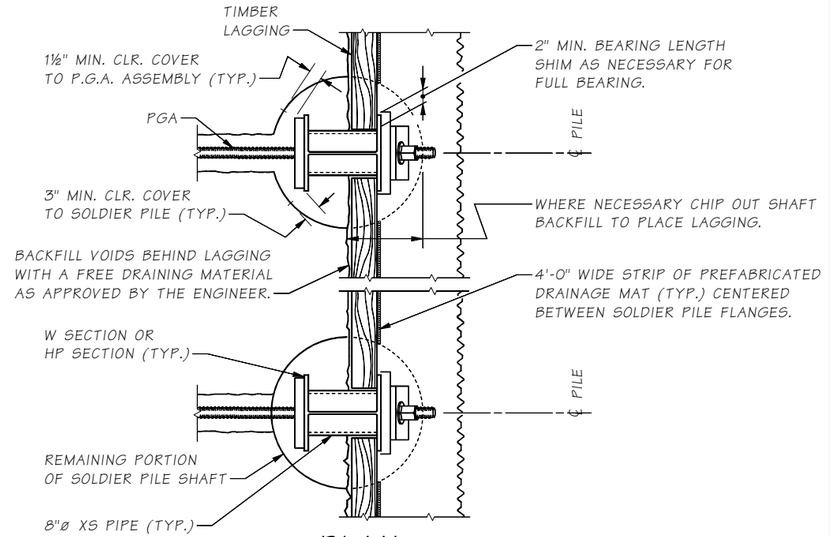
SHOWN FOR SOLDIER PILE WITH P.G.A.
SIMILAR FOR SOLDIER PILE WITHOUT P.G.A.

P.G.A.= PERMANENT GROUND ANCHOR

* USE CONTROL DENSITY FILL WHEN PLACED IN THE DRY. USE PUMPABLE LEAN CONCRETE WHEN PLACED IN THE WET.



PLAN SOLDIER PILE WALL WITHOUT P. G. A.



PLAN SOLDIER PILE WALL WITH P. G. A.

TIMBER LAGGING SIZES μ	
DEPTH (FT) τ	SIZE τ
0 - 9	4 x
9 - 18	6 x
18 - 30	8 x

4 x - OPTIONAL 4 x 8, 4 x 10 OR 4 x 12
6 x - OPTIONAL 6 x 8, 6 x 10 OR 6 x 12
8 x - OPTIONAL 8 x 8, 8 x 10 OR 8 x 12

Notes to Designer:

τ Depths and sizes shown are for example only. Fill in the table according to the earth pressure diagram and recommendations from the Geotechnical Services Branch, based on LRFD timber design for permanent lagging.

μ Determine, if possible, the length of time that the wall lagging will be used as the primary structural member in the transverse direction before a permanent wall fascia is applied.

For walls with P.G.A. use a section size with a flange width bigger than or equal to HP12x53 or W12x65.

For walls without concrete fascia panels:
1. Hem-fir timber lagging shall not be used.
2. Douglas fir-larch, grade no. 2 or better, treated in accordance with section 9-09.3(1), shall be used and shall be specified in the plan sheets and Special Provisions.

LAGGING IN SERVICE
36 MONTHS OR LONGER

Bridge Design Engr.	M:\STANDARDS\Walls\SOLDIER TIEBACK DETAILS B.MAN				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor									
Designed By					10	WASH.			
Checked By									
Detailed By					JOB NUMBER				
Bridge Projects Engr.									
Prelim. Plan By									
Architect/Specialist	DATE	REVISION	BY	APP'D					

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

SOLDIER PILE/TIEBACK WALL DETAILS 1 OF 2

BRIDGE SHEET NO.

SHEET OF SHEETS

SR JOB NO. SHEET

8.1-A3-3

Wed Oct 27 10:45:35 2010